

**CLAIMS**

1. A method for selecting one or more modalities from a group of modalities  
5 available in a communication device having a modality manager, the  
communication device operating in one or more communication systems, the  
method comprising the steps of:
  - (a) determining the available bandwidth;
  - (b) providing the bandwidth information determined in step (a) to the  
10 modality manager; and
  - (c) having the modality manager select the one or more modalities based on  
the bandwidth information.
2. A method as defined in claim 1, further comprising the steps of:
  - 15 (d) determining the cost with using one or more of the modalities;
  - (e) providing the cost information determined in step (d) to the modality  
manager; and
  - (f) having the modality manager select the one or more modalities based  
on the cost and bandwidth information.
- 20 3. A method as defined in claim 1, wherein the one or more modalities comprise  
input modalities.

4. A method as defined in claim 3, wherein the one or more modalities include video, still pictures, audio clips, voice and text.
- 5 5. A method as defined in claim 1, wherein the one or more modalities comprise output modalities.
6. A method as defined in claim 1, wherein the modality manager dynamically adapts the one or more modalities selected in step (c) based on a change in  
10 operational conditions.
7. A method as defined in claim 6, wherein the change in operational conditions that causes the modality manager to dynamically adapt the one or more modalities selected in step (c) includes a change in the bandwidth or change in  
15 cost of the service presently being used.
8. A method as defined in claim 6, wherein the change in operational conditions that causes the modality manager to dynamically adapt the one or more  
20 modalities selected in step (c) includes a change in the current ambient noise above a predetermined threshold level.

9. A method as defined in claim 6, wherein the change in operational conditions comprises communicating sensitive information and the modality manager dynamically adapts the selected one or more modalities if any are speech or audio based modality into a text based modalities in order to protect the sensitive information from being heard by others.
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10. A method as defined in claim 6, wherein the modality manager keeps track of user preferences for different modalities amongst the plurality of modalities and when the modality manager has to adapt the one or more modalities previously selected, the modality manager uses the preference information to select one or more new modalities to use.
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11. A radio communication device, comprising:

a receiver; and

5 a modality manager coupled to the receiver, the modality manager is responsible for dynamically adapting one or more modalities being used based on bandwidth and cost considerations.

12. A radio communication device as defined in claim 11, wherein the modality  
10 manager dynamically adapts one or more modalities currently being used if the ambient noise is above a predetermined threshold.

13. A radio communication device as defined in claim 12, further comprising a  
microphone coupled to the modality manager, and the microphone is used to  
15 determine the ambient noise.

14. A radio communication device as defined in claim 11, wherein the one or  
more modalities comprise at least one of video, still pictures, audio clips, voice  
and text.

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15. A radio communication device as defined in claim 11, wherein the radio communication device operates in a communication system having a server modality manager and the modality manager in the radio communication device communicates with the server modality manager in order to make sure  
5 that any information using a particular modality directed to the radio communication device can be supported.
16. A radio communication device as defined in claim 11, wherein the modality manager further checks for communication system availability if the radio  
10 communication device can operate in different communication systems and uses this information to dynamically adapt the one or more modalities used.
17. A radio communication device as defined in claim 11, wherein the modality manager dynamically controls which of the one or more modalities may be  
15 used with an application that is selected by the radio communication device user.
18. A radio communication device as defined in claim 11, wherein the modality manager ascertains the cost information from the communication system the  
20 radio communication device is operating in.

19. A radio communication device as defined in claim 11, further comprising a  
memory coupled to the modality manager; and  
wherein the modality manager ascertains the cost information from  
information stored in the memory.

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20. A radio communication device as defined in claim 11, wherein the radio  
communication device comprises a cellular telephone.